

RICKETTS (ED.)

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of the uterus.



EARLY DIAGNOSIS OF CANCER OF THE UTERUS.

A Paper read before the Cincinnati Obstetrical Society, June 14, 1894,

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It is not my intention, in this paper, to ask you to consider the latest discovery of a startling nature in pathology by "trotting out" another little beast of a formidable appearance, at least on the microscopical slide, with a personal desire that it might be added to the already extensive "Bacteriological Menagerie." Instead I bring for your consideration an old subject, trusting that the discussion may be fruitful in causing not a few earliest possible diagnoses, which I take to be the greatest and foremost step in doing an operation, that when done early promises more than does a late operation.

Cancer of the uterus is abroad in the land, and every member of this society has had these cases referred to him by the attending physician, with both patient and physician desirous of as much comfort as possible by the prolongation of life, if a cure cannot be hoped for.

We have cases reported in which an early diagnosis of cancer of the breast, followed by prompt extirpation of the gland, with non-recurrence even after five, ten, or more years. Why are we not to expect better results for as early an extirpation of the cancerous uterine globe, in which the disease is known to develop more slowly than in any other portion of the body?

We, as operators with some cause for complaint, say to the general practitioner, who sees these patients previous to consulting us, that we do not see them early enough to offer a procedure that promises the most in the way of relief, if not a cure; while the general

practitioner has the best of the argument when he asks justly for more light—that is, *how is he to see these cases earlier, and when once seen how is he to be able to make the earliest diagnosis?*

1. Let him impress upon the minds of every adult married female that cancer of the uterus is more liable to make its appearance between thirty-five and fifty years of age.

2. That a leucorrhea followed by a watery discharge, that soon becomes red, and in time offensive, staining the linen a dirty, yellowish-red, are symptoms demanding prompt consultation with the family physician as soon as the first named makes its appearance.

3. That he may have at his command three common and yet all-important aids, viz., those of sight, smell and touch. With these special senses properly educated, he seldom need be at a loss to make the required early diagnosis. Such a practitioner will not make a hurried, casual examination through unloosened skirt-bands and attempt to excuse himself by telling the patient that she is "having her change of life," and will be all right soon.

With prompt action on the part of the patient and physician, operators can offer a cure in a number of cases by means of the vaginal or the combined hysterectomy, with a desired prolongation of life in the remainder.

The physician possessing a normal nose, one index finger, one middle finger, one or two eyes, is peculiarly fortunate as to expense, for they cost not a thing. True, they do not glisten

so brightly, nor possibly do they impress the laity so profoundly, as the attractive recently imported microscopé that is so kaledioscopic, even in the hands of our trans-Atlantic myopic brethren, who are giving special attention to pathology as seen through the microscope. The operator should not attempt the work of the pathologist in connection with his work, nor should he be microscopist to himself.

For convenience we will divide the uterus into three sections.

1. The neck—that portion protruding from the upper end of the vaginal tube and into it, and which stands almost erect.

2. The attached—that tissue partition that separates the vaginal tube from the abdominal cavity.

3. The fundus—that portion of the uterus that lies within the lower portion of the abdominal cavity, save being covered by peritoneum.

Early cancer of the uterine neck can be felt and seen without dilatation of the uterine canal, in part or entire, and it can be seen and felt near the beginning of the leucorrhæal discharge; while cancer beginning in the attached or fundal portion is not recognized until the leucorrhæa and watery discharge is accompanied by the smelling discharge, unless the uterine cavity has been dilated as soon as a suspicious discharge begins.

Cancer beginning in the cervix spreads more rapidly to the attached and fundal portion; beginning in the attached or fundal portion it spreads to the neck; this latter form is longer amenable to treatment.

In multiparous cervices cancer is more easily recognized, while trauma is credited as the main exciting cause. In the non-multiparous uterus, in which cancer begins at the attached or fundal portion, we can not consider trauma as the main cause. With the earliest possible diagnosis of cancer, be it situated in the neck, attached or fundal, or be it found in all three localities at the same time, pregnancy should not be entertained by the primary or secondary uterine possessor nor by the physician. Under such circumstances it becomes a

highly offending member, just as much so as a cancerous eye, an osteo-sarcoma or a malignant mammary gland.

Cancer is a new growth, and in time breaks down; there is never any attempt at repair of the invaded tissue; it goes from bad to worse. There is a highly reddened condition of the tissue surrounding the growth, while the growth and surrounding tissue are tender and in a short time bleed easily when the probe, speculum or finger comes in contact with the same. The growth and surrounding tissue are engorged with blood, and when breaking down takes place depletion helps to reduce the size of the parts. The same is true with cancer located and breaking down in the attached or fundal portion.

Do what you may in internal medication, with local application of remedies, the loss of tissue as the result of cancer is never to be replaced by healthy tissue. In the very early stage the membrane covering the suspicious growth is smooth, while beneath it and through it the sense of touch alone will reveal the character of the nodule that soon, if the uterus is allowed to remain, is to prove so serious. In the early stage of the developing nodule the membrane covering the same is of a pink-white color, while that covering the surrounding tissue is somewhat of a deeper red; pressure of any kind gives pain.

Cancer located on the neck may look and feel like hard or soft nodules, or granular erosions may surround the os externum, but it differs with cancer, as it has a soft edge, while the mucous membrane has high points scattered and gradually sloping around within the soft border; it bleeds easily but does not slough, and with no treatment soon shows signs of repair.

The walls of a cancer nodule on the verge of breaking down are formidable, while its middle is depressed and the body catacombed, the result of sloughing.

In a follicular cervix the needle or bistoury will differentiate by a puncture of the follicles; you can rub any scarlet patch without causing the same to bleed.

Be the cancer located in the neck, attached or fundal portion, the first and

second cardinal symptoms, those of leucorrhea followed by watery discharge, are present. Later, as the result of breaking down, the characteristic odor makes its appearance; with such a change of symptoms present, not complicated by a non-malignant polyp, the cancer should be promptly diagnosed.

So soon as a leucorrheal discharge, with or without cancer of the cervix being made, followed by a watery discharge, with the first detectable odor that is not the result of non-malignant polypus, vaginal hysterectomy, with or without the combined method, is the only procedure to be considered.

With a cancerous deposit in which the characteristic bloody, watery, bad-smelling discharge has existed from

three to six months as a result of the breaking down cancerous tissue, nothing can be promised in a cure, but much can be promised in comfort to the patient, with possible prolongation of life, especially in cases where cancer begins in the attached or fundal portion of the uterus.

In the diagnosis of this disease, the microscopic aids have been disappointing—even misleading; if under the present delayed early diagnosis of the uterus, as a result of depending too much and too long upon the microscope, we are to make our escape, it is to be by intelligently *feeling* and *seeing* early, along with the earliest possible detection by *smell*.

DISCUSSION.

DR. A. W. JOHNSTONE: This is a most important subject, and I know every one of you are sitting here thinking of cases. I was thinking of a case that I saw years ago, before such a thing as total extirpation of the uterus was even thought of; had we known then what we know now the life of that patient would probably have been prolonged, but I doubt whether it would have been saved. I speak of it to illustrate the rapidity of growth. I saw the case in 1884. The patient was large and fleshy, and had no constitutional symptoms of any description, but had a pain about the uterus. I found what I thought was a little fibroid of the uterus. In less than a week I saw her again; she had a little hemorrhage, and sticking in the mouth of the uterus was a little polypus. Microscopical examination showed it to be cancerous. In less than three weeks it had filled the cavity. It was a simple ordinary carcinoma. The thing to do in carcinoma is to remove it as clean as you can. However, it is so insidious that sometimes before it breaks down or there is any smell the case is gone, and you will find it involving the lymphatics and almost in a hopeless condition. If the patient is a little stupid and pays no attention to herself, the

slight symptoms may be overlooked and you will not be called until it is too late. That has been my experience, and I suppose always will be the experience of all of us.

Some of you know my ideas about carcinoma. It has been a fad of mine for some time, and my ideas have crystallized down to the view that it is due more to the failure of the trophic nerves than to anything else. You know they are totally different from the adult tissue, and it is a trite saying that carcinoma is simply a return to the fetal state. Years ago I studied this in the lymph glands, and it is really beautiful to see that the transformation of them is very similar to the process of the manufacture of bone. After studying it all over I have come to the conclusion that it must be some failure of the trophic nerves. I remember about a year ago, while walking home from the Academy with Dr. Conner, after a discussion in which there had been nothing said as to the cause, I suggested this idea to him, and he said: "Yes, and you will see more than that if you study your cases closely. You never saw a case of cancer in your life that was not preceded by some nervous strain. This is frequently the death of a husband or child, or financial reverses." And he quoted Grant's case

as an example, where he had climbed to the highest pinnacle in the United States, and his son had wrecked him, and he said: "That is a typical case of cancer, and you will always find them preceded by some terrific nervous strain." So I believe that carcinoma is due—and sarcoma to a certain extent, too—to a failure of the trophic nerves; that this storage-battery is exhausted in old people, so we do not have the central control. The cancer is found in the remnants of the fetal structure; in the ovary it usually occurs in hilum, which is really the remnant of the second set of kidneys, which should have shrunken up and been only scar tissue. However, there is where the carcinoma is likely to appear. In the uterus, it is in the cervix, just after the uterus passes out of its usefulness. The same way with the breast, where it is most likely to occur at the menopause.

There is another thing you may urge against the etiology of carcinoma. I remember years ago, as a boy, one thing that I read in either the London *Lancet* or *British Medical Journal*, that gave a clue to the development of carcinoma. Some surgeon of the British army, in the foothills of the Himalayas, came in contact with the Hindoos. In their clothes they have a foolish habit of carrying a little bit of charcoal, and when cold they just squat down on it so as to bring it against the thighs or chest. In this way scars are produced, and he gave a list of two or three hundred carcinomas coming out of these scars on the thighs and chest, localities where we never hear of it in other parts of the globe. The scars are kept irrigated constantly by the charcoal being carried under the clothes and giving off fumes and irritative gases.

I believe in every part of our body we have a nerve coming from the trophic centre, whether this is in the stomach or the cerebro-spinal system, which keeps the tissues of the body regulated. With that cut off, the tissues are apt to do their own sweet will, and the tendency is to go back to the fetal state. I believe we are a great republic, with a great central control, and every nerve in the body has to have a certain control.

When this is cut off, the cells go back to the original state. You may say this is all theory and of no practical good, and you cannot convert it into dollars. I believe you can; it is not time for that yet.

I have one case which I have followed carefully and thoroughly. I do not feel I should as yet make a report of it, but I will tell you what I have seen. There is no mistake about it being a cancer; it came to me with a terrific ulceration, and was so diagnosed by two men in New York City. I opened the abdomen to take it out, but found a big chunk of a cancer involving the right ureter; I closed it up and quit. I then went to work to increase her nerve force if possible, and at the same time cleansed the vagina daily with the peroxide of hydrogen. Whether it was the disinfection or the manifest improvement of the woman's condition, I do not know, but that ulcer healed and skin grew over it. But the nodule continued growing. I have been working on the case over a year, and the gentleman from New York, whom I had previously seen, said he thought she would be under the sod long ago. The cancer has not been arrested, except to the extent that the frightful itching and the boils she had about the labia have all ceased; the growth of the cancer has not been arrested, but the ulceration was arrested.

This is a line along which I have been working for some time, and I hope some day we will have something; I beg of all of you to go to work along that line, restoring the nerve-force of the patients, so that if we get them up we can keep them from coming back. I remember my old professor saying that the day is coming when we will cure cancers with the hypodermic syringe, and I must say there may be something in it.

I can only congratulate the essayist upon the paper of the evening, and it will be my intention to follow his instructions as far as possible, and take them out as soon as possible. Some I have cut out, and now after ten or twelve years they have not returned. The longest case of cancer I know of

was in a very young fellow, a medical friend of mine, two years younger than I am. He had yellow fever, and in the delirium bit his tongue. He was an interne in the Charity Hospital of New Orleans. He had Bright's disease afterward, and this sore place he afterward went to doctoring, and a nasty granular tissue sprung up. It was cut out and examined, and he was told it was cancer. He came home, but was still kept down with the Bright's disease. He dragged on for six months or a year, and this thing sprang up again. I cut out a funnel-shaped piece all around it and sent it to a doctor in New York, and he said there was no doubt but it was cancer. He then weighed about 130 pounds, and now will weigh about 230. Most of the cases I have treated thus have done about that way. I believe if we ever get carcinoma under control it will be principally through the nervous system.

DR. C. D. PALMER: I believe every member here is obliged for the elucidation, theory and facts given us by Dr. Johnstone. The theory is very plausible; there is undoubtedly considerable fact in it. What is true in the case of General Grant is probably true in many other cases. The nervous condition has much to do with producing cancer. One of the most potent agents we have to control cancer is arsenic; the Fowler's solution is probably the best remedy we possess for the treatment. It has its influence upon the nervous system, and will control the cancer better than any other remedy we can give. It is also a potent, but not safe, remedy to apply topically.

While the paper was being read by Dr. Ricketts there occurred to my mind a means of diagnosis, mentioned years ago, which I think is of value. I am not disposed to discount anything he has said as to the value of the special senses, sight, taste, touch and smell, or the use of the microscope, which is probably the best of all. But a gentleman in Germany a good many years ago spoke of the reliability of the dilatation produced by the sponge in the diagnosis between hyperplastic induration and the induration from a cancerous growth.

The former will yield eventually and be dilated, whereas the latter will not yield, and will remain while the parts around dilate. However, I believe the microscope is the best means we have to determine cancer, and should be used in every case of doubt.

DR. A. B. ISHAM: I came down tonight to listen to the practical paper which has been read upon the early diagnosis of cancer, and not to offer any remarks; but since you were so kind as to call upon me, I may say that we cannot diagnose cancer upon the discharges, or the smell, or the induration of the cervix, because we may have all these conditions from specific disease of the cervix and of the body of the uterus. There occur to me now three cases in which there was the most offensive smell it is possible to conceive of, and which in this particular were equal to any cases of cancer I have ever met with, where there was a thickened condition of the cervix from tears due to parturition, where all the varied forms of the discharges met with in cancer were present, and where there was no positive evidence of specific trouble, but simply a suspicion. They were all cured by specific medication.

I think Dr. Johnstone's remarks, in reference to cancer being due to a disturbance of the trophic nerves, are directly to the point, for carcinoma is nothing more than cell proliferation, and where there is an affection of the trophic nerves cell nutrition may run riot. Perhaps we may sometimes find a remedy to control nerve action among the glandular extracts.

In conclusion, I wish to make an inquiry suggested by the paper, and that is whether there is a specific cancer cell, a cell that microscopically admits of no doubt of its being carcinomatous in its nature.

DR. RUFUS B. HALL: I did not expect to speak on this subject. If the theory of our friend Dr. Johnstone is true, how do we account for the large number of cases coming under observation with cancer in various parts of the body, in which the patient has no indication of any marked nervous derangement in any way? I am not question-

ing the truth of the theory, but ask this for information. I am not giving special study to this subject, as he is, but while listening to his interesting remarks I can recall many cases of cancer of the uterus and cancer of the breast in which the patient was otherwise in apparent health. And then, again, he recited the fact that this followed so frequently after nervous strain or some great mental stress or misfortune. I think the large majority of cases of cancer coming under my observation have occurred in patients without unusual mental strain, anxiety or worry. I do not believe the majority of cases are found in patients who have passed through such anxiety or strain as would make that a factor in the production of disease. I congratulate Dr. Johnstone upon his theory, and hope he will work out a problem that will be of value to us all, but the fact that we occasionally see cancer in these patients I do not think is sufficient to enable us to make that a factor in the diagnosis of cancer. We occasionally do see cancer in these patients. Where the disease is far advanced, we see the patients suffering with nervous manifestations, but do we see it early in the disease so marked as to make it a factor in the production of the disease itself? I don't want to say this in the spirit of criticism, but as a matter of fact coming under my observation, and I would like to ask Dr. Johnstone if he has any explanation why this is so.

DR. JOHNSTONE: The reason is Dr. Hall has not studied his cases close enough. What I mean is mental anxiety and worry, and not brain trouble or any manifestation of hysterics, but something that is giving the mind all it can possibly stand. When Dr. Conner first sprung this idea upon me I was like Dr. Hall, and did not think there was much in it. Since then, however, I have not let one of these cases go away from me without a careful questioning, and every one of them have a skeleton. This is true in nearly all of these cases. Now, I did not expect to speak of this, but expected to write a paper on it. While this may not be the correct line, it may lead us on to find something of practical value. Since Dr. Conner

called my attention to the universal worry of these people, and he spoke of it as a general surgeon, I have made a practice of winning the confidence of these patients, and in every case I have found a skeleton in the closet worrying the soul out of them.

But there is another thing, and that is heredity. How many of these people may inherit this tendency? It was the old idea that cancer was as hereditary as consumption. The heredity of consumption now is found to be only a weakening, by which we cannot fight the bacilli. Some people may stand worry better than others, and others may be comparatively weak. But then on top of it all we may find something else. At one time we thought there was only one Bright's disease; we may yet find that there are a dozen different kinds of cancer. The nerve idea certainly deserves close study. Certainly those fellows in the Himalaya Mountains cannot have much worry, but in those cases there is enough constant irritation to produce it. But you think of an old psoriasis, which goes on year after year, and you would think if anything would kill out the nerve centre it would be that. These cases develop *de novo* almost.

The doctor was asking the present condition of cancer, and what we know about it microscopically. In 1888 I published a paper on the growth of the cancer in the lymphatic cells, which bears directly upon this question. The round cells simply melt together, just as they melt in the formation of bone. You know Miller's idea—but it is too long to give you—regarding the calcification and decalcification, and the laying down of the Haversian system, etc. The round cells, I think, spring from the connective tissues, and wander around, and in turn run into the Haversian system. Until then you do not have the complete formation of the cancer nest. The round cells have frequently gone on ahead. They are the robbers that set up the rebellion; they have gotten out in the connective tissue spaces, and there you find it beginning. It is not the cancer nest, but it is this round cell we must get rid of. The

key is to get ahead of that round-celled invasion, for that is what makes the cancer grow. The nest is as the ashes after the fire has passed.

DR. HALL: I want to discuss the discussion and not the paper. I still disagree with Dr. Johnstone. For every case of that kind coming under my observation, in which there was a well-marked predisposing cause, at least a half-dozen cases have been under my observation in which there was no such cause. I do not agree with the doctor, but do not oppose the theory.

I want to emphasize one point in Dr. Rickett's paper, and that is the fact that these cases are referred to the operator so often for operation or diagnosis when the patient is beyond any operation—that is, the disease has passed so far that any operation is out of the question. In my paper before the American Association of Obstetricians and Gynecologists last year upon this subject I referred to that point. For each operable case sent in by physicians there are about ten who are past any operation. That has been about the ratio ever since that paper was written. Nearly all the cases have been under observation for months, but the physician in charge, not feeling certain as to the nature of the case, is afraid of making a blunder. Now, that ought to be righted in some way, and ought to be righted by the members of this society. Let the family physicians know that we are not going to criticise them if they refer to us a suspected case of cancer. They are afraid they will be criticized, and it will affect their reputation. Although I am, of course, free to say no man would do that, yet it is done.

DR. CHAS. BONIFIELD: I remember reading in the London *Lancet* or the *British Medical Journal*, a lecture in which this was spoken of, but a fatal objection to it in my mind is that it is not particularly in nervous people we see cancers. If that were the cause, it seems to me it would be in these slight, nervous women that we would most often find it, but we more frequently find it in the fleshy, phlegmatic people. If you come to put down care and trouble as the cause for the disease, you

can find it for almost every disease we have to treat. It has been very frequently brought forward as a cause for Bright's disease, and has always seemed to me more truly a cause for that than for cancer. There are very few people but have a skeleton in the closet, and if we question them close enough we will find either a little one or a big one.

DR. RICKETTS: It seems things go in spurts, even surgery, and at present I have no less than fifteen or twenty cases of cancer under observation, and in the last few days it seems to me every case I have examined has been cancer.

Now, while I hope the time will come when we will have made known to us the true cause of cancer, yet while they are hunting for that cause I propose to be one of the number to advocate the earliest possible diagnosis of cancer of the uterus, on common-sense principles, and urge the earliest possible extirpation of that cancerous nodule. While we have our friends who are ready to theorize, and I will admit they are working on lines that are commendable, yet I have been asked even lately by physicians, "will you tell us how we are to get hold of these cases earlier, and when we get hold of them how are we to know they are to be operated upon?" Dr. Johnstone spoke of the women knowing about it. All women cannot be made to diagnose these, and the general practitioners cannot be expected to carry microscopes around in their saddle-bags. As I stated, there are three things given to man that do not cost him much, and yet I think they have been overlooked to a great extent; in other words, the cart has been put before the horse, and I feel justified in saying that these cases must be gotten at earlier. In this house to-night there is a patient in whom I propose to extirpate the uterus for prolongation of life and as a palliative measure, and for nothing else. The patient is begging for comfort.

In regard to the theory of Dr. Johnstone, I call to mind quite a number of cases of cancer, and while I can recall a number of them who are very nervous subjects, yet I can call up a number of cases in as jolly subjects as I

know of, and in which I have been unable to unearth anything to indicate that they had suffered from any depression of any kind. I look at it in this way, that we must get at these women in some way; I do not care whether it comes through the microscope or what, but get them so they will promptly con-

sult their physicians when they have this leucorrhæal discharge followed by the watery discharge, which may be productive of a bad odor, and then I believe we will have made a step in the treatment of cancer such as we have never made heretofore.



